CARB Infrastructure Standardization Needs Assessment Subgroup Notes 11/7/01

Infrastructure Needs Assessment Subgroup Meeting
Attendee's

Bill Boyce,	SMUD
Enid Joffe,	CFCI
Dave Packard	EVI

Needs Assessment
Need behind the Need for EV Infrastructure:
#1 EV drivers want and need <u>real time knowledge of charging station locations, availability and operating status</u>. This would reduce wasted effort associated with locating a charging station and determining if it is operational, ICEd, or currently charging another EV.

#2 Infrastructure and EV Supporting Organizations need to know if they have the appropriate density of chargers in a given usage area to meet user demands.

Immediate Needs:
Everyone (Users and Supporters) would like to have a better idea on where all the EV charging stations are located and what their operation status are.

Charger Location Databases
Inductive
Approximately 3800 Inductive Units installed in California to-date
- Approximately 235 locations are unknown
- Magne Charge is currently validating there database
- Validation rate is averaging 3 charging sites per day

Conductive
Approximately 3500 Conductive Units installed in California to-date
- Approximately 500 locations are unknown

Feedback to Database Access
- Infrastructure Providers are reluctant to let outside entities complete access to their databases for competitive reasons

- Infrastructure Providers would be willing to provide discreet data outputs to outside entities at regular time intervals (monthly)

- Clean Car Maps:
    o Good System for Public Charging
    o Woefully out of date with regard to new charging station locations
    o Needs funding for continual updates and maintaining contacts
    o Needs complete information from provider databases

Other Discussions
Real Time Status System
- A real time reporting system could be set up using something similar to the General Motors "On-Star" or "LoJack " tracking system
    o Cars would be equipped with a GPS receiver in their car that would show car location and location of all nearby charging stations. Charging stations could then transmit their current status, (Operational, Non-Operational, In-use). Charger status data could be color coded on the car GPS read out. For example: green charger symbol would indicate an open operational charger, red would indicate a non-operational charger and yellow would indicate a operational but in-use charger.
    o Would require cars be equipped with a enhanced GPS receiver that is capable of adding real time charger operational status data
    o Chargers would require remote data transmitters
    o Individual charger data would probably need to be collated by a central ground station and then sent out to the cars in an amplified processed form.

Over-saturate Charging Station Installations